In search of online deliberation: Towards a new method for examining the quality of online discussions

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Abstract

Many advocates of deliberative democracy see in the Internet a new opportunity for the development of public spaces, public spheres, and places where deliberation can take place. An important element of the notion of the public sphere in general and of deliberation specifically, is the quality of the debate. In the past decade, many studies have been conducted to evaluate online discussions in light of the ideal notion of the public sphere. However, a wide gap exists between theoretical approaches and the actual operationalization of such theories for empirical research. In an attempt to bridge this gap we develop a method for examining the extent to which Internet forums meet the normative requirements of rational-critical debate, reciprocity, and reflexivity. The methodological approach consists of a textual analysis of the contributions made to an online forum. The coding scheme presented in this article is based on a case study (UK Online) and guided by the theoretical notions of deliberative democracy.

Keywords: deliberative democracy, digital democracy, e-democracy, online deliberation, online discussion, public sphere, website analysis.

Introduction

Over the past decade, much has been said about the potential of the Internet with regard to providing a discursive space in which the deliberative process can be enhanced among citizens at large.[1] In fact, some theorists who advocate direct public involvement in the deliberative process assume that deliberation can be conducted entirely through interactive electronic media, such as the Internet. The ideal public sphere that deliberative democrats dream of has seemed to become less dubious and more realistic with the potential presently offered by the Internet. According to Barber (1998: 255) this wave of new information communica-

tion technologies "can challenge passivity, they can enhance information equality, they can overcome sectarianism and prejudice and they can facilitate participation in the deliberative processes". It is these possibilities, which have created a reinvigorated interest in public sphere theory.

Such rhetoric has been gaining momentum over the past few years, mainly due to the phenomenal surge in the number of Internet users and the innovations in Internet technologies. Furthermore, the Internet is believed to offer a possible remedy to an ailing public sphere, which has seen progressive shrinkage of discursive spaces, and the mass media, which have become increasingly entrenched in commercialization and tabloidization (see Calhoun, 1993; Curran, 1991; Kellner, 1990; Golding and Murdock, 1989; Habermas, 1989). This situation has brought about many theoretical and methodological questions concerning the potential of the Internet as an extension of the public sphere or as a virtual public sphere in its own right.

Although studies into deliberation, public sphere, and the Internet have grown in quantity, there is still much lacking in this field of research in terms of quality. Hence, the conclusions that can be drawn in terms of the potential of the Internet are very limited. A growing body of literature on the Internet, the public sphere, and deliberative democracy is available, but in terms of sound empirical findings, the field is still in its early phases. In particular, there seems to be a wide gap between theoretical approaches and the operationalization of such theories for empirical research. This is due mainly to the abstract nature and the complexity of concepts related to the public sphere and deliberation like equality, freedom, reflexivity, empathy, and sincerity. As such, work is still needed to develop ways to evaluate Internet forums.

The aim of this article, then, is to contribute to the development of a method to evaluate Internet forums in light of the ideal public sphere. Given the difficulty of such an endeavor, we limit the task to a specific part of the public sphere, namely the process of deliberation. Within that area, we further limit the study to specific normative conditions of deliberation, the quality of the debate in terms of communicative rationality, reciprocity, and reflexivity with regard to the process and participants of online forums.

We first consider the theoretical notions of the public sphere, focusing on the process of deliberation and the normative conditions related to this concept. These aspects are discussed at some length as this is necessary to later develop good indicators. The development of indicators is where Internet research on the public sphere and deliberation has been lacking up to now. For this reason, the bulk of this article consists of creating a methodological approach, which retains the complexity and richness of the theoretical notions, but at the same time consists of con-

crete indicators, which can be used to evaluate the Internet forums. Hence, the methodological approach presented here is derived from both theory and practice. An exploratory case study, presented in the last section, forms the basis for this article's developed approach.

Public sphere and deliberation

The notion of deliberative democracy in contemporary discussions covers a multiplicity of theoretical approaches from Barber's (1984) 'strong democracy' to Dryzek's (1990) 'discursive democracy'. Since democratic theory took a deliberative turn a little more than a decade ago (Dryzek, 2000), theorists and academics from different backgrounds have applied the deliberative model to everything from new radical forms of democracy to more traditional models of representative democracy. Questions regarding who should deliberate, what can be deliberated, and what deliberation is, are just a few of the areas in which deliberative democrats divide among themselves. However, despite these differences a core set of propositions distinguishes the deliberative model of democracy from its adversaries. Deliberative democrats "all highlight the role of open discussion, the importance of citizen participation and the existence of a well-functioning public sphere" (Gimmler, 2001: 23).

Central to the deliberative model of democracy is the concept of a 'well-functioning' public sphere. Such a well-functioning public sphere requires four crucial dimensions, initially developed by Habermas (1974, 1989). First, the public sphere requires citizens to act as active agents in the political process. Second, the public sphere requires discursive spaces whereby citizens can actively engage in deliberation. Third, the public sphere requires mass media that are both a transmitter of information and a forum for a 'critical eye' on governmental affairs (see also, Bernstein, 1995; Calhoun, 1993; Curran, 1991). Finally, there is the process of deliberation itself, which, according to Habermas (1989), must take the form of rational-critical debate. It is here where the 'heart and soul' of the public sphere can be found. As such, Habermas and other deliberative democrats have attempted to create sets of rules and procedures with regard to the process of deliberation. Normative conditions such as freedom, equality, sincerity, and rationality would be met in this ideal public sphere. Moreover, it would be "a neutral zone where access to relevant information affecting the public good is widely available, where discussion is free of domination by the state [and economic influences] and where all those participating in the public debate do so on an equal basis" (Curran, 1991: 83). Within this public sphere, the participants collectively decide, through rational arguments, the way in which they wish society to develop.

This article focuses on the actual process of deliberation, which lies at the center of the public sphere. It is within discourse (the process of deliberation) whereby the public sphere is constituted. Habermas' theory of communicative action (1984, 1987) reveals that participants who engage in discourse assume and utilize a set of normative conditions of the public sphere. Drawing from Habermas' theories and those of other advocates of deliberative democracy the following normative conditions are distinguished: *the process of understanding*, *sincerity*, and *equality/ freedom* (see further Graham, 2002). Although all three conditions are crucial to the process of deliberation, this article only deals with the first, the process of understanding. To be able to do justice to the complexity of the notion of understanding within deliberation, we limit ourselves to this condition; nevertheless, short descriptions are provided of the other two conditions − sincerity and equality/freedom.

Sincerity as a normative condition of the public sphere implies that all strive to make all information − including their motives, interests, intentions, desires, and needs − known to other participants. Equality can be divided into structural equality and discursive equality. Structural equality refers to the equality among participants outside the process of deliberation. Habermas and deliberative democrats alike argue that access to discursive forums must be open to anyone who is affected by the validity claims under consideration (Barber, 1984, 1998; Bohman, 1998; Bohman and Rehg, 1997; Cohen, 1997; Dryzek, 2000; Elster, 1998; Rawls, 1971). Discursive equality requires that all participants have equal status and equal voice (Cohen, 1997). Freedom concerns freedom of the forum itself and of the participants within the forum. Freedom of the forum itself can be assessed in terms of freedom from intrusion of governmental, political, and commercial forces in the political affairs of the people. Freedom of the participants within the forum, on the other hand, refers to the freedom of expression people enjoy within the process of deliberation itself (Barber, 1984; Bohman, 1998; Dahlberg, 2001a, 2001b; Habermas, 1975, 1989, 1987, 1990).

Process of understanding

The ideal process of deliberation envisioned by Habermas must take the form of a rational-critical debate − a process of giving, defending, and questioning validity claims and reasons. Such a process requires three progressive levels of understanding. Reciprocity represents the first of these levels; put simply, it is the taking in (listening, reading) of another's claim or reason and giving a response to that claim. Reciprocity on its own, however, does not satisfy the process. A deeper level of understanding is required − that of reflexivity. Reflexivity is the internal process of

reflecting on another's claim or reason against one's own claim or reason. Then lastly, empathy is needed, a process of 'putting yourself in their shoes'.[2]

Such a process requires, primarily, a commitment to listening just as much as speaking (Barber, 1984). Listening becomes paramount to the process of understanding; as Barber (1984: 175) argues, "a strong democracy nourishes the mutualistic art of listening that by its very practice enhances equality". Second, such a process requires a commitment to practice, practice in engaging in deliberation. Deliberative democrats argue that such practice can be seen "as a sort of exercise program for developing human or civic virtue" (Fearson, 1998: 59), a virtue of reasonableness and fair-mindedness (Rawls, 1971). In other words, practice within the deliberation process becomes the means by which these virtues are instilled into citizens; "practice of presenting reasons will contribute to the formation of a commitment to the deliberation resolution of political questions … committed to deliberative justification" (Cohen, 1997: 77).

Finally, the process requires time, energy, and patience in order for participants to go through this internal and external interactive process of exchanging claims and reasons. As Barber (1998: 259) so eloquently points out, "democracy depends on deliberation, prudence, slow-footed interaction and time consuming forms of multilateral conversation and social interaction that by post-modern standards may seem cumbersome, time-consuming, demanding, sometimes interminable, and always certifiably unentertaining". The following dimensions of the process of understanding can largely be examined by looking solely at the content of the forum: rational-critical debate, reflexivity, and reciprocity.[3]

First, deliberation involves a rational-critical debate; "Deliberation involves engaging in reciprocal critique of normative positions that are provided with reasons and thus are criticizable − are open to critique rather than dogmatically asserted" (Dahlberg, 2001b: 2). First, such deliberation requires that participants provide reasons and justifications for their claims. The deliberation is reasoned "in that the parties to it are required to state their reasons for advancing proposals, supporting them, or criticizing them" (Cohen, 1997: 74). Cohen (1997: 76) argues that the consequence of reasonableness of the deliberation procedure enables participants to "find reasons that make the proposals acceptable to others who cannot be expected to regard 'my' preferences as sufficient reasons for agreeing". Bohman (1998: 402) concludes similarly by stating, "reasoning in a procedure that embodies norms of freedom, equality, and publicity would produce an outcome that everyone in principle could accept". The key point here is that rational-critical debate implies that "no force except that of the better argument is exercised" (Ha-

bermas, 1975: 108). "The rationality of an assertion depends on the reliability of the knowledge embedded in it. Knowledge is reliable to the extent that it can be defended against criticism" (Wilhelm, 1999: 162).

The second crucial element is, then, criticism. Critical assessments of validity claims by the participants provide the means by which reasons are tested, and the validity is assured. Finally, rational-critical debate must maintain coherence and continuity. Ideally, coherence requires that all participants maintain a level of commitment to the issues under discussion. Such a commitment further requires that participants continue deliberation until consensus can be achieved and the common good realized. In sum, the process of rational-critical debate requires four attributes: reasoned and justified validity claims, critical assessment of validity claims, a commitment to coherence, and a commitment to continuity.

The second key element to the process of understanding is reciprocity. Reciprocity can be defined as the opportunity to gain knowledge concerning the perspectives of others and the degree to which these opportunities are realized. Essentially, reciprocity implies a mutual exchange, a giving and taking of perspectives and knowledge. In terms of the process of deliberation, reciprocity "refers to the notion that people are engaged in conversation with each other, and that their messages are reflected upon, discussed by others" (Schneider, 1996: 74). Reciprocity then can be seen as important with regard to the public sphere because it can act as an indicator of the degree to which participants are actually interacting with each other.

Reciprocity is defined as the giving and taking of validity claims, arguments, and critiques among participants, thus representing the first level in the process of understanding. Ideally, this requires that participants read (listen to) all other participant's validity claims and arguments. Reciprocity here is more than just a participant-to-participant relationship, rather, it implies a dispersing affect − participants-to-participants, a web of relationships (giving and taking).

However, in terms of the process of understanding, reciprocity represents merely the first step. Simply recognizing and listening to and reading other participants' perspectives are not enough in order to achieve mutual understanding. Participants must move past the superficial level of reciprocity and achieve the deeper level of reflexivity. According to Dahlberg (2001b: 2), reflexivity requires that participants "critically examine their cultural values, assumptions, and interests, as well as the larger social context". In other words, when challenged with reasoned perspectives or strong critiques, participants must consider what this implies with regard to their own perspectives and use the input of others to reflect upon themselves.

Internet and public sphere

Although a number of studies have already been conducted on the Internet and the public sphere or deliberation, no conclusions can yet be drawn regarding the potential of the Internet in this respect, because of a lack of sound methods to investigate it. Several difficulties have not been fully overcome in these studies. First, the process of deliberation is difficult to investigate because it involves not only a social process − interaction between individuals − but also an inner process (psychological) − the reflecting, shaping, and constructing that one does mentally as a result of social interactions with others. Ideally, one would study more than merely the content of the Internet to assess such a process, but to date, most studies focus solely on just that (Witschge, 2002). We maintain that the potential of the Internet can only be fully grasped when interviews are held in addition to an analysis of the actual content of the Internet. In this study, we nevertheless focus solely on the latter, as the aim is to develop a method to examine at least one part of deliberation in a 'sound' way, as this has not been accomplished thus far.[4]

Second, the notion of deliberation is a very complex and abstract theoretical concept, which makes it difficult to translate into empirical indicators. Similarly, the elements of the process of understanding − more specifically, reciprocity, reflexivity, and empathy − are not mutually exclusive; that is to say, there is no black and white sketch as to where one element begins and another starts. Rather, there exist areas of gray between these elements. This presents researchers with a variety of methodological difficulties, such as defining, operationalizing, and measuring/assessing the conditions of understanding for empirical research.

Finally, in addition to the abstract nature of the process of deliberation, researchers are faced with the diverse forms of the Internet, more specifically, the rapid development of the Internet and the variety of online forum types available within this new medium. Such forum types as instant chat and bulletin board systems present researchers with their own set of unique characteristics. For this reason, only a limited part of the process of deliberation is investigated in this article. As such, the focus then is to provide a thorough way of examining a number of elements within deliberation.

In search of a method

In light of the difficulties with regard to research into online deliberation, how are the online discussions to be coded so that justice is done to the theoretical complexity of the notions of public sphere and deliberation? We propose a specific form of analysis of the contributions being made

to an online forum. The proposed form of analysis is based on an exploratory case study and is therefore limited in scope. However, we feel that the approach can be used for studies of other online forums. This exploratory case study does imply that the form of analysis is in an early phase of development. In this section, we first describe the nature of the case study, which employs a content analysis as the main method. Second, we discuss the operationalization of the aspects of the process of deliberation by defining the coding categories. These categories were derived from the text rather than postulates a priori (although their formulation was guided by the theoretical notion of deliberation). Finally, we discuss the coding agenda in relation to the normative conditions under examination − how the coding categories form indicators for the normative elements of rational-critical debate, reciprocity, and reflexivity.

Research design

As previously mentioned, this article focuses on developing a method to evaluate online forums. This is done by comparing the existing situation in a specific forum with the ideal of the process of deliberation, identified by Dryzek (1990) as a 'counter-factual ideal,' evaluating the real world against a set of ideals. The question to be answered by the assessment that is proposed in this article is: To what extent does the online forum meet the requirements of the ideal form of rational-critical debate, reflexivity, and reciprocity? To develop such a method, we use a specific case to draw indicators of instances where the ideal of the process of deliberation can be found. As such, the categories of the content analysis are firmly grounded in theory, but also have a close connection to the actual practice of a specific online discussion. The forum of UK Online is used as an exploratory case study. This case study can be seen as a prelude to further social research (Yin, 1994). It focuses on the exploration and testing of methodological approaches for future empirical research, rather than looking for overarching generalizations and conclusions.

The aim of the article is to create inductive categories that provide references or guidelines, which act as the framework for interpretation. These categories only act as tentative guidelines, and the researcher has room to interpret the texts and develop the categories further via 'feedback loops' (Mayring, 2000). Thus, we identify categories, as in other forms of content analysis, but rather than identifying them a priori, we base the categories more on an understanding of actual practices online. This is to avoid one of the major pitfalls of using a content analysis, producing superficial results (see Mostyn, 1985). We try to incorporate

the context information through systematic interpretation; the significance regarding the contents of statements is determined without reducing the material to quantitative statements (Mayring, 2000).

Coding categories

The coding categories are developed to operationalize the normative elements of the process of understanding with the focus of analysis being placed on 'what is said'. Therefore, in the first stage, the unit of analysis is the individual message (posting), and next (when present) the argument(s) within these messages. In addition to the individual message, the relationship between the messages within a thread is analyzed. The following section begins by listing and describing these coding categories and what they entail. The next section discusses how these categories assess for each of the three elements within the process of understanding: rational-critical debate, reciprocity and reflexivity.

The coding categories are divided into three groups. The first group consists of the categories, which look to determine the *message type*. This group has three headings: *initial*, *responses*, and *irrelevant*. The second group contains the categories, which look to assess the messages for the type and use of *counter-evidence*. Finally, the last group of categories assesses the style of response within a message, the use of what we term *Argument-Referencing* and *Argument-Breakdowns*. The coding process is summarized in Figure 1 and is discussed in detail below.[5]
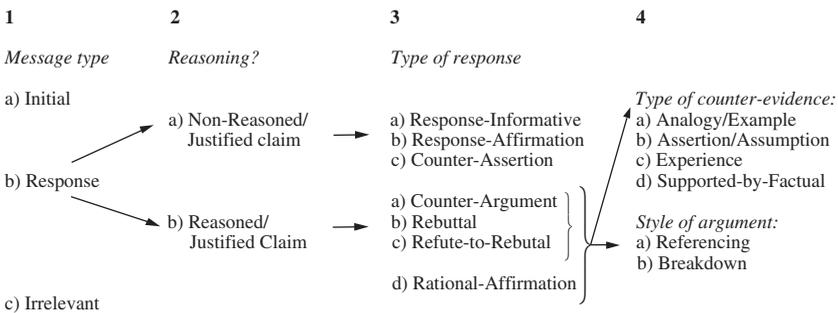
Coding phase

Figure 1. *Coding Scheme*

Message type

The first level of analysis is to establish what a message contains, the message type. At this level of analysis, messages are assessed and coded as one or more of three possible message types, which are called 'initial',

'response', and 'irrelevant'. It is important to note here that these coding groups are not mutually exclusive and as such, a single message can be coded as one or more of the three possible message types. For example, a message can be labeled as 'initial' and/or 'response', depending on whether the message contains more than one thread.

First, the coding category of *Initial Rational-Argument* was developed to analyze messages for the presence of initial reasoned validity claims. Any message, which provides a validity claim accompanied by a reason or justification, which is not a response to another message but is an initial line of argument is coded as initial rational-argument.

The second set of categories codes for *Responses*, interaction between the participants. A message is considered to be a response when it refers to another participant's or participants' message(s) by either a direct citation (a direct referral to another author's or authors' message content), or through an indirect citation (when the content of the message can be seen as matching and replying to the content of another).

The response categories are divided into two sub-sections: those that are accompanied by a reasoned validity claim and/or a reasoned critique of another's validity claim and those that are not. They can both be further divided into a number of sub-categories. The responses that are *not* accompanied by reasoning can be divided into the following three categories: *Response-Informative, Response-Affirmation, and Counter-Assertion*. A message that lacks a reasoned/justified validity claim or critique but is a response to another message(s), which seeks information and/or asks a question and/or provides information/clarification is coded as a *Response-Informative. Response-Affirmation* is used to code messages that lack a reasoned/justified validity claim or critique, but are a response to another message(s), and seek to affirm another position, statement, and/or opinion. The final category in this sub-section is *Counter-Assertion*, which refers to messages that are a critique of another message(s) but lack a reason/justification and an alternative claim. Again, it is important to note here that these categories are not mutually exclusive. Messages, for instance, can seek for more information while at the same time they can affirm another's position.

The second sub-section consists of the coding categories that do give arguments/reasoning for their positions. The following categories can be distinguished: *Counter-Argument, Rebuttal, Refute-to-Rebuttal*, which represents critical arguments and *Rational-Affirmation*, which represents reasoned affirmations. A message, which critically responds to an initial rational-argument (this may include a rational-affirmation as well as another type of counter argument), which is reasoned/justified and which provides an alternative claim, is coded as a *counter-argument*. A message, which is a reasoned/justified response to a counter-argument in defense

of the original claim under discussion, is coded as a *rebuttal*. A message that responds to a rebuttal, by the original author of the counter-argument that initiated the rebuttal, which is reasoned/justified, is coded as *refute-to-rebuttal*. Note here that a refute-to-rebuttal needs to be a continuation of the counter-argument or the alternative claim. If it is not, it is coded as a new counter-argument or initial rational-argument. Finally, any message, which affirms another message(s) by providing a reasoned/ justified affirmation in support of another author's or authors' claim(s), is coded as *rational-affirmation*. Messages that do not fall under any of the categories listed above (neither initial or response) are coded as *Irrelevant*.

Counter-evidence

After the above sets of coding categories have been coded for, a second level of categories, which assess a message's use of evidence in support of its claim(s) or critique of claim(s), are coded. All messages coded as counter-argument, rebuttal, refute-to-rebuttal, rational-affirmation are further analyzed and coded for their type of counter-evidence used and the way in which it is used.

The first of these categories is *Supported-by-Analogy/Example*. A message, which supports its claim by using analogies and/or analogical examples, is coded as such. The second category, *Supported-by-Assumption/ Assertion* codes for messages, which support their claim by asserting a conviction or by assuming certain things. A message where the author uses a personal or second hand experience to support a claim is coded as *Supported-by-Experience*. The final category, *Supported-by-Factual*, refers to messages, which support their claim by providing factual evidence. Such evidence could include citations to outside sources or references to facts. It is important to note here that the validity of this evidence will not be checked, given the time frame and the exploratory nature of this study. Further, it is important to note that these categories are again not mutually exclusive; a message can be coded as employing one or more types of evidence.

Style of argument

After the second set of coding categories have been coded for, a third and final level of categories, which assess a message's argument style, is coded. These are *Argument Referencing* and *Argument-Breakdown*. A message coded as a counter-argument, rebuttal or refute-to-rebuttal, which provides a response that refers to the other claim point-to-point, is coded as *argument referencing*. A message coded as argument referenc-

ing, which further provides a point-to-point breakdown, accompanied by counter-evidence − factual, experience, and/or analogy/example − that confronts the opposing argument under question and supports its own claim is coded as argument-breakdown. More specifically, a point-to-point breakdown means a participant addresses an opposing argument point-to-point, issue-to-issue. Further, such a breakdown is accompanied by counter-evidence, which is utilized to support the author's claim and to challenge the opposing claim in light of the point under discussion. A message coded as an argument-breakdown has addressed another's claim thoroughly (point-to-point), used counter-evidence (other than assertions/assumptions), and has used that evidence both to support the alternative claim and to confront the opposing claim.

Indicators for the process of deliberation

As we have seen in the above section, a number of different elements within an online discussion can be identified. How can we examine whether or not a discussion meets the requirements of the process of deliberation, rational critical debate, reciprocity, and reflexivity? In the paragraphs that follow, we come to an operationalization of these three requirements in terms of the arguments used.

Rational-critical debate

As set out above, rational-critical debate requires that participants provide reasoned/justified validity claims, which are critically discussed among the participants, and that this process maintains some level of coherence and continuity. The first prerequisite, rational debate, is assessed by calculating the number of messages coded as initial rational-argument, rational-affirmation, counter-argument, rebuttal, and refute-to-rebuttal present in the discussion thread. By determining the number of messages coded as such and dividing that number by the total amount of messages posted, we can calculate the percentage of rational messages present within a discussion thread.

The second prerequisite, critical assessment of validity claims, can be assessed by calculating the number of messages coded as counter-argument, rebuttal, and refute-to-rebuttal present in the discussion thread. By determining the number of messages coded as such and dividing that number by the total number of messages posted, we can calculate the percentage of rational-critical messages present within the discussion thread.

The final prerequisites, coherence and continuity, are assessed from three perspectives. First, we measure for the number of 'one-timers' pre-

sent within the forum; the 'one-timer effect' can be seen as an inhibiting factor to continuity and as such should be measured. One-timer refers to participants who post one posting within the discussion thread. The 'one-timer effect' refers to a set of problems or difficulties, which stem from high levels of one time posters such as fostering sporadic debates, decreasing the level of continuity and causing time constraints. Second, we assess for continuity in terms of the commitment of participants, their frequency of continued interaction with other participants. Are there high levels of rebuttals and refute-to-rebuttals? If there are extended interactions between participants in the form of rational-critical debate, then the opportunity to reach deeper levels of understanding increases. We visually plot the flow of interaction as a means of assessing continuity.

Finally, we assess the messages with regard to coherence by determining their consistency to the issues under discussion. Do the messages stick to the same lines-of-issue? Ideally, participants should stick to the issue at hand until a decision can be taken. Further, consistency becomes paramount to the progressive levels of the process of understanding, such as reflexivity and empathy, because such levels of understanding are slow in developing by nature. As such, message threads should maintain consistency with the issue under discussion. We first analyze all the messages, after which the messages are divided and categorized based on the themes discussed. Identifying such themes allows for an assessment of the level of coherence within the discussion thread. Such an assessment consists of analyzing the number of changes in themes, the relevance of the changes, and the make-up of the changes as a whole. It is important to note here that such a process of dividing and categorizing is subjective and that such categories are not 'black and white'. It would be conceivable that a message, categorized under one line-of-issue could be seen as being placed under another line-of-issue. However, that being said, the purpose here is not to create a complete topical breakdown based on a precise account of the issues under discussion within the thread. Rather, such categories act as major 'landmarks' as to where the issues under discussion blatantly change.

Reciprocity

Reciprocity represents the first progressive level to the process of understanding and it requires that there is a giving and taking of claims and arguments by participants. It represents a superficial level in that it only looks to see if participants are reading each other's claims and are responding to or interacting with each other. One of our major critiques of past research in terms of their assessments of reciprocity was that such

research focused on message-to-message, author-to-author relationships and neglected messages-to-messages, authors-to-authors relationships, or what we call the 'web of reciprocity'. Such a focus tells us little about the level of reciprocity as a whole within a discussion thread. Reciprocity in the ideal discursive forum could be visualized as a web, within which all the participants are connected either directly or indirectly by their deliberation. As such, we map out the interaction among participants, the relationships between participants, by constructing a visual map of the messages, which will show how the messages correspond between participants and how they connect the participants. We then are able to determine to what extent the discussion thread under investigation forms a reciprocal web, whereby we are able to assess the level of reciprocity as a whole, participants-to-participants, messages-to-messages.

Reflexivity

In terms of reflexivity, we examine the messages for both the presence and subsequent use of arguments and counter-evidence. The style and use of arguments and counter-evidence within a message can tell us a great deal about the level of reflexivity present. As such, the third element of the process of understanding, reflexivity, is examined for and assessed at three progressive levels of analysis. Level one assesses the level of alternative claims present (the percentage of counter-arguments, rebuttals, and refute-to-rebuttals), which presents us with the boundaries in which reflexivity can be further assessed for, leading to level two. This second level takes a closer look at the messages themselves by assessing a message's use of counter-evidence along with assessing the *type* of counter-evidence used. Level three assesses each message as a whole, examining for Argument-Referencing and Argument-Breakdowns. Level three identifies messages with high levels of reflexivity.

Level one, first, provides a broad picture of what the thread has to offer in terms of the potential for reflexivity. We begin by calculating the number of messages that are coded as counter-argument, rebuttal, and refute-to-rebuttal. Reflexivity can be assessed through analyzing the messages for the presence of counterarguments, rebuttals, and refute-to-rebuttals. According to Kuhn (Kuhn interpreted by Cappella, Price, and Nir, 2002: 75), the ability to provide counterarguments and rebuttals suggests, "that people can envision the conditions that would falsify their explanations", meaning here that they to some extent have reflected upon another's message. Although Kuhn refers to situations where people can envision counter-arguments to their own claim, we feel the same goes to some extent for giving counter-arguments to other's positions. If a participant takes the time to propose a counter-argument/rebuttal/re-

fute-to-rebuttal, this implies that some degree of reflexivity is present. As such, by determining the percentage of counter-arguments, rebuttals, and refute-to-rebuttals within the discussion thread we can at the very least infer the presence of reflexivity but more importantly, such a measurement will indicate the potential of this thread in terms of reflexivity.

However, such an assessment alone is superficial at best. Therefore, we take it a step further and analyze these messages for the type of counter-evidence used and for the way in which it is used. Kuhn (1991) maintains that the use of counter-evidence to some extent indicates that a participant has taken the time to reflect upon the alternative position against his or her own because in order to use counter-evidence one needs to know what to defend against or what has come into contradiction with ones position. This would "indicate knowledge of alternative positions at odds with one's own" (Cappella, Price, and Nir, 2002: 75). Therefore, by assessing the messages for the presence and usage of counter-evidence, we may be able to provide a better assessment of reflexivity within the discussion thread and within the individual message.

There are two important factors with regard to counter-evidence and reflexivity, the type of counter-evidence used and the way in which it is used, its usage. It is through the combination of both factors whereby levels of reflexivity can be recognized. The type of evidence is important because certain forms of evidence could imply a deeper understanding of the alternative claim, and thus imply more reflexivity. For example, a participant who supports his or her argument with evidence composed of facts and/or experience and/or to some extent analogies/examples as opposed to evidence composed of assertions/assumptions is more likely to have reflected deeper upon the alternative position because such evidence requires more thought. More thought in terms of such questions as how to use this evidence, why it should be used, where it should be used, the actual process of obtaining such evidence, and so on. All of this can be seen as requiring a deeper level of reflexivity on the part of the user of such evidence as opposed to those participants who just use assertions, assumptions as support for their claim.

The usage of counter-evidence can also be seen as a possible indication of a participant's (message's) level of reflexivity. According to Kuhn (1991), participants can use counter-evidence within counter-arguments, rebuttals, and refute-to-rebuttals in three typical ways. The first and the most commonly use of counter-evidence is to support one's own claim. For example:

Original claim:
The EU should limit the number of Mediterranean fisherman because according to Green Paper 565, the blue, gray, and yellow fish populations are at an alarming low level.

Usage 1:
I disagree. The EU should not limit the number of fisherman because it would cause unemployment and increased taxes. According to the EU Unemployment Office, such an increase in unemployment would cost member nations an additional 5 billion Euro.

This example shows that usage 1 does not address the evidence provided by the original claim; rather usage 1 uses its evidence to support its alternative claim. Usage 1 does indicate that this participant has read the original claim, but at what level has this participant actually reflected upon the original claim as a whole? It is hard to say here because usage 1 neglects to mention or refer to the evidence provided by the original claim (the Green Paper, Fish population report) and as far as we know, he or she may not have even considered it.

The second way in which participants use counter-evidence is to discount or contradict the opposing, competing claim. Using the same original claim let us now provide an example of usage 2:

Usage 2:
I disagree. The EU should not limit the number of fisherman in the Mediterranean. Your point about Green Paper 565 is well taken here, however, just recently the World Save the Fish Organization (WSFO) reported that the method used by the EU Fishing Commission for assessing the levels of blue, gray, and yellow fish populations is flawed. As such, the consequences of limiting fisherman in the Mediterranean such as unemployment and raises in taxes are not justified based on these inadequate methods.

This example, addresses the original claim by providing counter-evidence, which challenges the evidence and position of the original claim and as such, this example can be considered as possessing a fairly high level of reflexivity.

The final way in which participants use counter-evidence is by using a combination of both one and two. For example, using the same original claim from above:

Usage 3 (consisting of the usages 1 and 2):
I disagree. The EU should not limit the number of fisherman in the Mediterranean. Your point about Green Paper 565 is well taken here, however, just recently the World Save the Fish Organization (WSFO) reported that the method used by the EU Fishing Commission for assessing the levels of blue, gray, and yellow fish populations is flawed. As such, the consequences of such actions like unemployment, and raises in taxes are not justified based on inadequate methods. Further,

according to the EU Unemployment Office such an increase in unemployment would cost member nations an additional 5 billion Euro this year alone.

This example provides counter-evidence that challenges the original claim and supports its alternative claim, as such, this message can be considered as being reflexive. The third usage form here can be seen as implying a deep level of reflexivity because such a usage of counter-evidence requires that the participant reflect upon the original claim in light of his or her own. This further indicates a deeper level of reflexivity within the messages. As such, those messages, which use a combination of both counter-evidence − factual, experience, and analogy/example − and usage form 3 are considered to possess high levels of reflexivity.

Evolving from level two, the last level of reflexivity, level three, looks to analyze counter-arguments, rebuttals, and refute-to-rebuttals for the presence of Argument-referencing and Argument-breakdown. Argument referencing assesses messages for their ability to address another's claim completely when participants refer to all the points raised by the ensuing claim. As such, when a message refers to another message's claim point-to-point, this can be coded as argument referencing.

Messages coded as argument-referencing are further assessed for argument-breakdown, which is when an author addresses another author's validity claim point-to-point, while at the same time providing counter-evidence in the form of factual and/or experience and/or analogy/ example, which utilizes usage form three (stated above). Messages that are coded as argument-breakdown can be considered as obtaining very high levels of reflexivity because they provide an alternative claim, counter-evidence that fits both the ideal type, and the ideal usage form. Moreover they address an opposing claim point-to-point, give a complete breakdown of the competing claim. As such, a message coded as argument-breakdown can be seen as living up to the normative condition of reflexivity required by the ideal notion of the public sphere.

In search of online deliberation

In this section we apply the methodological approach set out above and report on the results derived from using this method. The case to which the method is applied is a political forum located on a United Kingdom governmental website called UK Online.[6] UK Online provides information, resources, help, guidance and a means for action online. It aims at providing fast and easy services to its citizens, to give everyone access to the Internet by 2005, and to have all government departments fully on-line by that time. Next to the wide range of web services relating to

electronic democracy and governmental information and services, the website also provides a wide range of online discursive forums (BBS is the forum type). Here citizens can discuss political issues affecting the United Kingdom and voice their opinions on such issues to their governmental representatives. Further, through its newsroom, it provides access to research, news, and information concerning a wide range of political issues facing the UK today.

The website offers a 'citizen space', which provides thirteen discussion groups. These discussion groups, at the time of analysis, consisted of over 2800 discussion threads, which were composed of over 20000 postings (messages) and these numbers continue to grow daily. For this article the discussion group labeled Crime, Law, Justice and Rights is chosen, which focuses on discussions concerning civil and human rights, crime, ethical issues, the justice system, law and security. The criterion used for this selection was that it is a discussion group that is political by nature, meaning discussion of issues that deal with the public interest.

At the time of the analysis, the discussion group consisted of over 200 discussion threads, which were composed of over 2400 messages. The discussion thread called Execute Machiavelli, which at the time of analysis consisted of 25 messages, was selected for further analysis. The selection of this thread was based on two criteria. First, the thread consisted of only 25 messages, spread out over a two-week period; its size fits the scope of this exploratory study. Secondly, the thread deals with an issue (the issue of immigration) that has seen much media attention and that can be seen as a 'hot topic' of the time. The title 'Execute Machiavelli' is misleading; the initial message starts by paraphrasing from the works Nicolo Machiavelli, however, the discussion thread deals with immigration, more specifically touching upon religion, multiculturalism, and the positions of politicians with regard to immigration policies. The analysis of the discussion thread entitled Execute Machiavelli focused on examining for the first three elements of the process of understanding: rational-critical debate, reciprocity, and reflexivity. The results are presented in the following sections.

Rational-Critical Debate

In terms of the first prerequisite of rational-critical debate, reasoned/justified debate, the discussion thread 'scored' rather high; see Table 1. Nearly three-quarters (18 messages) of the twenty-five messages contained a reasoned/justified argument(s). One may thus conclude here that this discussion thread does in fact come close to meeting the normative condition of reasoned or rational debate.

With regard to rational-*critical* debate, again, the level was quite high. More than two-thirds (17 messages) of the twenty-five messages posted

Table 1. *Rational-critical debate*

| Category*	Frequency
Initial Rational-Argument	5
Counter-Argument	8
Rebuttals	6
Refute-to-Rebuttals	3
Rational-Affirmation	1
Response-Informative	6
Response-Affirmation	0
Counter-Assertion	2
Irrelevant	0
Messages coded as Rational**	18
Messages coded as Rational-critical**	17

* Messages could be coded into more than one of these categories
** Total number of messages, containing one or more of the categories belonging to rational or rational-critical respectively.

contained a critical argument of another participant's validity claim or alternative claim. Only two of the twenty-five messages posted contained critical assertions, providing a critical statement without a reasoned/justified argument. The level of rational-critical arguments within this discussion thread can be seen as fulfilling the prerequisite of rational-critical debate, with regard to the normative ideal.

The third prerequisite for the normative element of rational-critical debate is that the process of deliberation must maintain some level of coherence and continuity. First, in terms of the one-timer effect, three out of seven participants posted only once. This number is quite high, but comparable with results found in other studies (see Rafaeli and Sudweeks, 1997; Schneider, 1996, 1997; Tanner, 2001; Van Selm, Jankowski, and Tsaliki, 2001).

In terms of commitment to continued interaction via Rational-Affirmations, Counter-Argument, Rebuttals, and Refute-to-Rebuttals, the discussion thread can be seen as having relatively high levels. Figure 2 represents the flow of rational-critical messages with message one (the first Initial Rational-Argument − also note here that messages # 4, 12, 19, 22 represent Initial Rational-Arguments) representing the starting point of the flow. The arrows indicate the flow between messages. There seems to be relatively high levels of continuity as a whole, as messages lead to more messages. As Figure 2 indicates, five out of the eight counter-arguments were responded to by rebuttals. Further, the flow from these five counter-arguments along with one counter-assertion (message 14) brought about ten more messages in response. Finally, as Figure 2 sug-
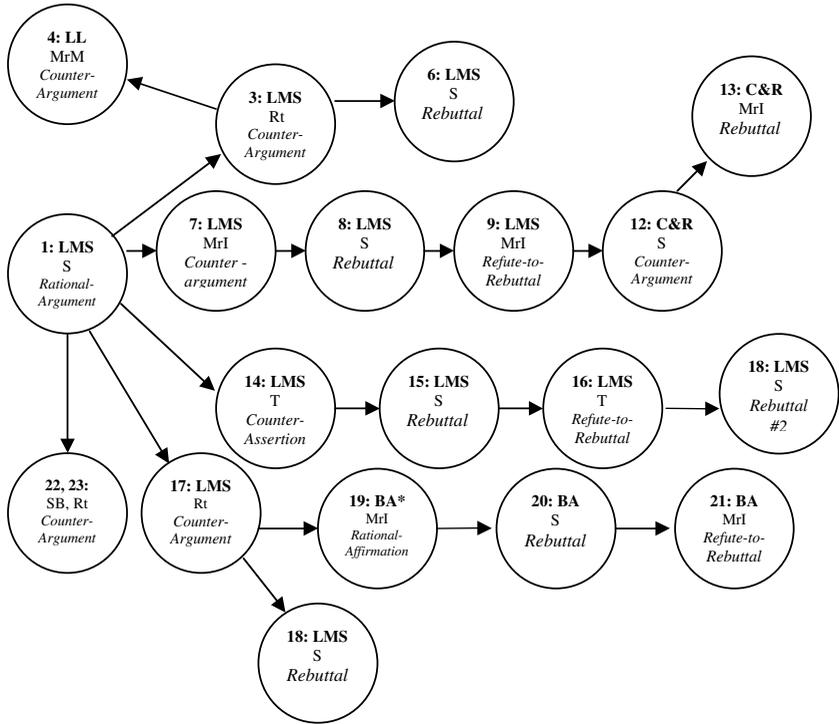
Legend

Lines-of-Issue		Posters	
LMS:	Lack of Moral Spine	MrI:	Mr. Ian
C&R:	Christianity and other Religions	MrM:	Mr. Moor
LL:	Loony Left	Rt:	Rational-Thought
BA:	The Bible Accounts	S:	Summersmr
SB:	Simple Believers − God is not	T:	Terrapin

* Message 19 was coded as both a Rational-Affirmation and Counter-Argument

Figure 2. *The continuity of discussion flow chart.*

gests, this message flow represents that 18 of the 25 messages form a continued debate. As such, continuity here in reference to the participants' commitment to continued rational-critical debate could be considered relatively high.

Finally, in terms of coherence and continuity, there were six lines-of-issue present within this discussion thread; see Table 2. As discussed earlier, the ideal rational-critical debate requires that participants stick

to the topic of discussion. Therefore, the number of lines-of-issue should remain at a minimal level, while a majority of the messages stick with the main issue under discussion. However, there can be two distinctions made between line-of-issue shifts: those that are indirectly related to the issue at hand and those that are irrelevant to the issue at hand. Often discussions diverge from the original issue at hand due to points of clarification and information or due to new issues that are discovered and which are relevant to the issue at hand, therefore, needing to be addressed. These sorts of divergences we consider to be indirectly related to the original issue and as such cannot be considered as creating disturbances in the continuity and coherence of the discussion flow.

Line-of-issue number one, which dealt with the initial topic at hand (the issue on immigration and what politicians need to do, their lack of Christian morals), represented thirteen messages throughout the discussion thread; see Table 2. As such, most of the participants stuck to the topic at hand and when messages did diverge from the original line-of-issue (which was five separate times), the discussion eventually found its way back. Out of the five line-of-issue shifts, only one can really be seen as a complete divergence, an irrelevant shift from the original issue. This irrelevant line-of-issue (# 3 'Is Hitler Jewish') represented only two out of the twenty-five total number of messages. Further, this line-of-issue was recognized as 'wondering off' the original issue by the receiving participant. The four remaining shifts in the lines-of-issue were indirectly related to the original issue under discussion. Overall, in terms of continued and coherent debate, this discussion thread can be seen as maintaining an acceptable level, which is required for fostering the process of understanding.

As a whole, all three prerequisites under the process of rational-critical debate may be interpreted as substantially being fulfilled within the discussion thread entitled Execute Machiavelli. As such, this discussion thread can be seen as offering the necessary framework for fostering the next two progressive levels of understanding those being reciprocity and reflexivity.

Table 2. *Lines-of-issue*

Line-of-Issue	(n = 25)
Politicians lack a moral spine − the threatening immigrants	13
The loony left	2
Is Hitler Jewish?	2
Christianity and other religions	2
The Bible's accounts of	3
Simple minded believers-God is not absolute	3

Reciprocity

As discussed earlier, reciprocity in the ideal state can be visually comparable to a web, whereby all the participants are connected to each other through their interactions, their messages. Therefore, a network of interactions between participants within this discussion thread is constructed, which is now discussed further by using the ideal visualization, a 'web of reciprocity', as criteria for an evaluation of these interactions in terms of the thread's level of reciprocity as a whole; see Figure 3.
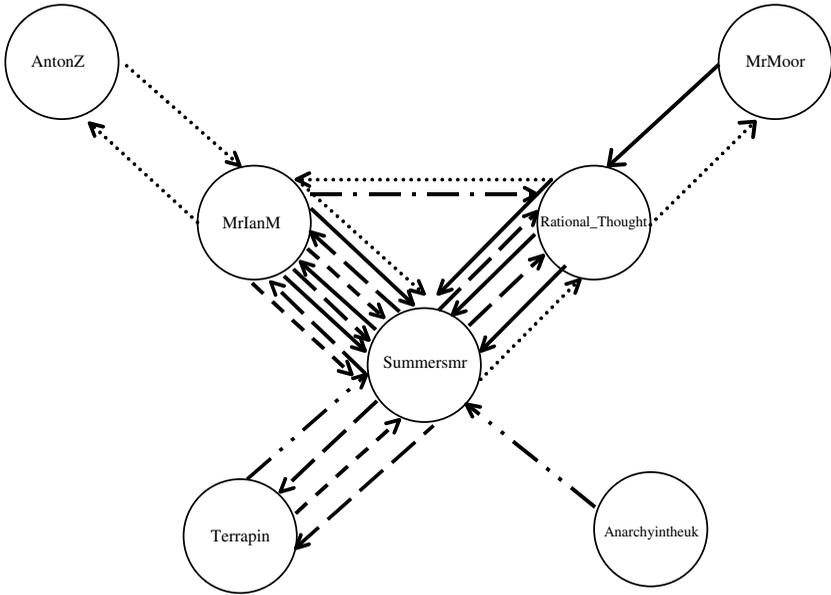
In terms of a web of reciprocity, the discussion thread under analysis falls quite short of this visualization. First, the interaction between participants resembles an 'octopus' or pyramid shape, in which the head of the octopus or top of the pyramid, in this case participant Summersmr, acts as the apex of discussion. The flow of the messages here, the interaction, resembles a one-to-many and many-to-one flow whereby participant Summersmr represents the pivotal point of departure. Further, as we analyze the diagram for interaction between the other participants, we can see that the only dual interaction, which contributes to a web of reciprocity, is the limited interaction between Rational-Thought and MrIanM.

The only other interaction, which does not stem from Summersmr, is those four message postings evolving from the two one-timers, AntonZ and MrMoor (M10, 11 and M4, 5). As such, the flow of messages here does not take on the shape of a web; rather this discussion takes on the resemblance of a pyramid with a few participants acting as the apex of discussion. Therefore, we would argue that reciprocity, as a whole here is quite low.

However, when a message-to-message, participant-to-participant assessment of reciprocity is used, the picture changes dramatically. From this perspective, every message with the exception of the initial message (Message 1) represents a response to another message(s). Further, as indicated in the previous section, there are high levels of extended interactions in the form of rational-affirmations, counter-arguments, rebuttals, and refute-to-rebuttals between participants (as Figure 2 suggests). The concentration of interaction in terms of continued interactions falls between three participants, Rational-Thought, MrIanM, and Summersmr, with Summersmr acting as the focal of attention.

Reflexivity

As laid-out above, reflexivity is assessed at three progressive levels. The frequency with which messages contained rational-affirmations (1), counter-arguments (8), rebuttals (6), and refute-to-rebuttals (3) indicate

Figure 3. *Web of reciprocity*

the presence of reflexivity at the first level within the discussion thread. When participants take the time to form reasoned alternative claims or reasoned affirmation of original claims, one can reasonably assume that there is some level of reflexivity taking place; when one constructs an alternative claim one needs to have reflected upon the original claim to some extent in order to come up with a counter-argument. In this forum, rational-affirmations, counter-arguments, rebuttals, and refute-to-rebuttals represented seventeen of the total number of messages posted. This

is a very high number in relation to the total number of messages posted and it indicates that this discussion forum maintains some level of reflexivity or rather offers the potential for deeper levels of reflexivity.

The second level of reflexivity consists of examining for counter-evidence and the usage of counter-evidence; as such, we begin by discussing the results in terms of types of evidence used within the thread, followed by discussing the usage of these types. Finally, we end this level by discussing the results in terms of the combination of both factors; it is here where we can recognize a deeper level of reflexivity within the messages and within the thread as a whole. Twelve messages were coded as using analogy/example types of evidence, while assumption/assertion types of evidence were used in ten messages followed by factual types of evidence, which were used in seven messages.

Further, when taking a closer look at the progression of arguments, from counter-arguments to refute-to-rebuttals, we can notice some interesting things happening; see table 3. Within counter-arguments, both assumption/assertion and analogy/example types of evidence were the most prevalently used types. Seven out of the eight counter-arguments used one or both of these forms of counter-evidence, while factual types of evidence were present in only two of the eight counter-arguments. However, as these arguments evolved into rebuttals a change in types of evidence being used can be noticed. Assumptions/assertions drop to three out of six, while analogy/example types similarly fell to three out of six. Interesting is that factual evidence with regards to rebuttals, on the other hand, sees a substantial increase in use (four out of six). Moving to refute-to-rebuttals a similar situation occurs, Assumption/assertion types of evidence are not at all used, while analogy/example types is now used in two of the three refute-to-rebuttals and factual in one. Thus, as the arguments progress into deeper levels of debate, there tends to be an increase in the 'quality' of arguments, in the sense that assumptions/assertions decrease and factual evidence increases. As discussed earlier, messages that use factual evidence, experience evidence, and to a lesser extent analogy/example rather than assumptions/assertions can be

Table 3. *Types of evidence used in different levels of argumentation**

Type of evidence	Counter argument (8)	Rebuttal (6)	Refute-to-rebuttal (3)
Assumption/ Assertion	7	3	0
Analogy/Example	7	3	2
Experience	0	0	0
Factual	2	4	1

* More than one type of evidence could be coded per message

considered as enhancing the quality of debate and the level of reflexivity because these forms of evidence (when used properly) can be assumed to require deeper levels of understanding.

The second question concerning reflexivity deals with the way in which counter-evidence is used in the reasoning. Three types were distinguished in this article. First, one can use counter-evidence to support one's own claim (*usage 1*). Second, one can use counter-evidence to discount or contradict the opposing, competing claim (*usage 2*). Third, they can use a combination of these two (*usage 3*).

Table 4. *Usage of counter-evidence in different levels of argumentation*

Usage	Counter-arguments (n = 8)	Rebuttals (n = 6)	Refute-to-Rebuttals (n = 3)	Total (n = 17)
1	2	1	0	3
2	2	0	0	2
3	4	5	3	12

As Table 4 shows, deeper levels of argumentation (from counter-arguments, to rebuttals, to refute-to-rebuttals) go hand-in-hand with more use of counter-evidence to both support one's own claim and discount or contradict the opposing claim. This means, that when progressing in the *level* of the argument (through reasoned reaction to postings), the *use* of arguments evolves as well. As discussed earlier, those messages that employ usage 3 with factual types of evidence and/or analogy/example types of evidence could be considered as reflexive messages because those messages have addressed both their own claim and the original claim by using evidence that requires a deeper level of understanding.

To establish whether reflexivity at the highest level is present, the messages from level two are coded, to see whether they fit the category argument referencing. Seven messages indeed could be coded as such, while they addressed the other's claim point-to-point. Interesting here is that most of these messages came from a string of interaction, which took place mainly between two participants (Summersmr and MrIanM) towards the end of the discussion thread. As the discussion developed it seems as though the participants 'fed off' each other in terms of the quality of discussion. Participants began to be more thorough in their responses, meaning they began to provide critical arguments that moved point-to-point through the argument of the other participant.

Out of these seven messages, five of them were coded as argument-breakdown, indicating that these five messages were in fact very reflexive. They provided a point-to-point breakdown, accompanied by an alternative claim and uses counter-evidence − factual, experience, and

analogy/example − to support its own claim and to confront the opposing argument under question. They, therefore, satisfy the normative element of reflexivity. Further, we can see again, like in level two, a progressive development in the quality and reflexivity of the messages.

Given the exploratory nature of this case study, there is little in terms of overarching conclusions or generalizations we can infer from these results. And, although it is not quite the aim of this article to draw conclusions with respect to the overall quality of this debate, we can state that applying our methodological approach to the case of this specific discussion thread seems to imply the requirements of the process of understanding in deliberation, were met to a large extent. These findings and the applicability of the method are further discussed in the following section.

Conclusion and discussion

In this article, we have tried to fill part of the gap that exists in the methods for Net democracy research. As described in the beginning of this article, interest in deliberative democracy has grown with the coming of the Internet. Likewise, the number of studies in this area has increased enormously in the past decade. Despite these two trends, no conclusions can be drawn regarding the potential of the Internet. Although the Internet as a medium seems to have become established, the field of Net democracy is still in an early phase with respect to research methodology. In particular, there seems to be a wide gap between theoretical approaches and the operationalization of such theories for empirical research. This is due mainly to the abstract nature and the complexity of concepts related to the public sphere and deliberation like equality, freedom, reflexivity, empathy, and sincerity.

In this article, we have tried to contribute to the development of a method to evaluate Internet forums in light of the ideal public sphere. As we acknowledged, the difficulty of such an endeavor necessitated considering only one component of the public sphere, the process of deliberation. Within that focus, we further limited the study to specific normative conditions of deliberation, namely the quality of a debate in terms of rational-critical debate, reciprocity, and reflexivity within online forums.

We first defined the different requirements of the process of deliberation, after which we focused on identifying indicators to evaluate online forums in light of these requirements. Based on a case study and guided by the theoretical notions of deliberative democracy, a coding scheme was developed, with which textual contributions to online forums could be examined.

The coding of the postings to the forum entailed three steps. First, the *message type* was to be identified. Three categories were distinguished:

initial, *responses*, and *irrelevant*. Second, the type and use of *counter-evidence* in the messages was assessed. Are the responses to other messages reasoned, and if they are, do they contain *counter-arguments, rebuttals*, *refutes-to-rebuttal*, or *rational-affirmations?* Finally, to assess a message's style of response, the use of *argument referencing* and *argument-breakdowns* was to be coded. Through these categories, the normative requirements were then operationalized.

Through the actual application of these coding schemes, the quality of a discussion within the forum of 'UK Online' could be evaluated. The overall quality in terms of the process of understanding appeared to be high. In addition, a number of other findings emerged from the approach. First, in terms of rational-critical debate, the coding scheme presented in this case study can be considered an effective means for assessing online political forums for this normative element. The visualization of the continuity of the debate can offer researchers a more detailed account of a discussion group's continuity. In addition, the assessment in terms of the lines-of-issue assessment can be very effective in terms of addressing the level of coherence in online forums.

Second, in terms of reciprocity, the visualization presented here could provide future researchers with a more comprehensive analysis of this normative element. The visualization provides an ideal means of measuring reciprocity within a discussion group as a whole. It allows us to visually conceive the message relationships that have been formed. As a result, these relationships as a whole can be evaluated in relation to the normative notion of a web of reciprocity.

Finally, in terms of reflexivity, the three levels of analysis provided a comprehensive and thorough assessment of the texts. One trend was the progressive increase in the level of reflexivity within the messages moving through the three levels of counter-arguments (counter-arguments, rebuttals, and refute-to-rebuttals). As the commitment of the participants with regard to the discussed topic at hand increased, so too did the level of reflexivity. We infer that key to deliberation, as deliberative democrats advocate, is continued commitment.

Thus, not only does the methodological approach seem to provide an applicable and useful tool for evaluating online forums in terms of the process of understanding, but it also seems to provide insight into the abstract process of reflexivity. However, some limitations of our approach must be considered before such conclusions can be drawn.

First, it is important to repeat again that this is only the first step in developing a methodological approach for examining the extent to which online practice meets the normative requirements of the process of deliberation and the public sphere. We have deliberately limited ourselves to

three of those requirements, which means that there is still a long way to go before a full evaluation of online practices can be achieved.

Second, the fact that this methodological approach worked for the specific case of UK Online, does not imply, that this approach will be equally appropriate for analysis of other types of online forums. As such, we acknowledge that this study was exploratory by nature, and that the applicability of this method to other types of online forums thus needs to be examined further. We did, however, aim to make the process of both the development of the indicators for the normative requirements in terms of coding categories, and the actual analysis as transparent as possible, so that the method can at least serve as a basis for analysis for future research.

Third, although the methodological approach described in this article can and has provided interesting insights, an important part of the process of understanding is still missing. By limiting the analysis to what is actually said in the online forums, the actual processes that take place in the minds of participants has not been determined. Although this can to a certain extent be deduced from the contributions to a discussion, ideally such an approach would be complemented with interviews of the participants, to see whether more use of arguments and counter-arguments means that the participant achieved higher levels of understanding. This being said, we do feel that the methodological approach that is presented in this article adds a piece to the puzzle, which we hope will lead to further development in future studies.

Notes

1. This article stems from the Master's thesis of Todd Graham (2002) and was presented at the European Institute of Communication and Culture (Euricom) Colloquium 'Electronic Networks and Democracy', Nijmegen, The Netherlands (October 2002). We thank Nick Jankowski and an anonymous referent for the very useful comments they provided.
2. We do not deal with the element of empathy in this article. Because the focus is on developing a method to analyze the content of the online forums, this normative element does not fit within the scope of this work. Interviews with the participants are needed to examine the existence of empathy, inasmuch as this is mostly an internal process (Graham, 2002).
3. We acknowledge that examining the content ideally would go hand in hand with interviews of the participants to actually see to which extent those normative conditions are met, not only as expressed in the debates itself, but also in the mind of participants.
4. It exceeds the limits of this article to discuss all the different studies and their difficulties and shortcomings. For more detail see Graham (2002).
5. For the coding agenda with the definitions of the categories, see Appendix A.
6. Available URL (consulted May−June 2002) at: http://www.ukonline.gov.uk.

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Appendix A:
Definitions of the coding categories

Types of messages and arguments within the messages:

1. Initial Rational Argument: Any message, which provides a validity claim accompanied by a reason or justification, which is not a response to another message and that is an initial line of argument.

2. Response

2.1. Non-reasoned/justified claims

   2.1.1. Response-Informative: A message that lacks a reasoned/justified validity claim or critique but is a response to another

message(s), which seeks information and/or asks a question and/or provides information/clarification.

    2.1.2. *Response-Affirmation:* A message that lacks a reasoned/justified validity claim or critique but is a response to another message(s), which seeks to affirm another position, statement and/or opinion.

    2.1.3. *Counter-Assertion:* A message that is a critique of another message(s) but lacks a reason(s)/justification(s) and an alternative claim.

2.2. *Reasoned/Justified Claims*

    2.2.1. *Counter-Argument:* A message, which critically responds to a Rational-Argument (this may include a Rational-Affirmation as well), which is reasoned/justified and which provides an alternative claim.

    2.2.2. *Rebuttal:* A message, which is a reasoned/justified response to a Counter-Argument in defense of the original claim under discussion.

    2.2.3. *Refute-to-Rebuttal:* A message that responds to a Rebuttal, by the original author(s) of the Counter-Argument (important here is that it needs to be a continuation of the Counter-Argument, the alternative claim), which is reasoned/justified.

    2.2.4. *Rational-Affirmation:* Any message, which affirms another message(s) by providing a reasoned/justified affirmation in support of another author's or authors' claim.

3. *Irrelevant*

Messages containing reasoned/justified claims (2.2), are further coded for:

  a. *Supported-by-Analogy/Example*: A message, which supports its claim by using analogies and/or analogical examples.

  b. *Supported-by-Assertion/Assumption*: A message, which supports its claim by asserting a conviction or by assuming certain things to be as such.

  c. *Supported-by-Experience*: A message, where the author uses a personal or second hand experience to support a claim.

  d. *Supported-by-Factual*: A message, which supports its claim by providing factual evidence, which could include citations to outside sources or references to facts.

Messages coded as 2.2.1, 2.2.2 and 2.2.3 are further coded for:

  I. *Argument-Referencing*: A message coded as a Counter-Argument, Rebuttal, or Refute-to-Rebuttal, which provides a response that addresses the other claim point-to-point.

II. *Argument-Breakdown*: A message coded as a Counter-Argument, Rebuttal, or Refute-to-Rebuttal, which provides a point-to-point breakdown, accompanied by alternative claim and uses counter-evidence − Factual, Experience, and Analogy/Example − to support its own claim and to confront the opposing argument under question.